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APPLICATION	NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,419	)	08/05/2003	James Lester Hicks	PC25286A	7789
28880	7590	09/26/2005		EXAMINER	
		MBERT COMPANY	BALASUBRAMANIAN, VENKATARAMAN		
2800 PLYMOUTH RD ANN ARBOR, MI 48105			•	ART UNIT	PAPER NUMBER
				1624	
				DATE MAILED: 09/26/2005	DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<del></del>		Application No.	Applicant(s)						
		10/634,419	HICKS ET AL.						
	Office Action Summary	Examiner	Art Unit						
		Venkataraman Balasubramanian	1624						
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address								
Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status									
1)	Responsive to communication(s) filed on								
· · · · · ·		his action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is								
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
4)🖂	4)⊠ Claim(s) <u>1-13</u> is/are pending in the application.								
•	4a) Of the above claim(s) is/are withdrawn from consideration.								
5)	Claim(s) is/are allowed.								
6)⊠	Claim(s) <u>1-6 and 10</u> is/are rejected.								
7)⊠	Claim(s) 7-9 and 11-13 is/are objected to.								
8)□	Claim(s) are subject to restriction and	d/or election requirement.							
Applicati	on Papers								
9)[	The specification is objected to by the Exam	iner.							
10) 🗌 .	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority under 35 U.S.C. § 119									
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received.									
2. Certified copies of the priority documents have been received in Application No									
3. Copies of the certified copies of the priority documents have been received in this National Stage									
	application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.									
Attachment(s)									
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da							
3) 🔯 Infom	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/	08) 5) Notice of Informal P	Patent Application (PTO-152)						
Paper	r No(s)/Mail Date <u>3/8/2004</u> .	6)							

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#### **DETAILED ACTION**

Claims 1-13 are pending.

### Information Disclosure Statement

References cited in the Information Disclosure Statement, filed on 3/8/2004, are made of record.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Son et al. WO 00/51990

Son et al. teaches several variously substituted 2,4-pyrimiidine compounds for treating viral infections, which include compounds and composition claimed in the instant claims. See entire document. Especially see page 2, formula I and note the definition of various variable groups Z, A, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup>. Note A = O, and Z is O or S or NH, the given definition includes groups embraced in instant Q-R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup>. Thus compounds taught by Son et al., generically includes instant compounds. See pages 2-7 for further details of the invention. Particularly see Table 1, compounds for various compounds made. Especially see compounds, 24, 25, 26, 27, 28, 66 and 67 which includes instant compounds.

Claims 1, 2, 4, 5 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Wright US 6,177,437.

Wright teaches several uracil compounds for treating Herpes simplex virus, which include instant compounds and composition. See column 3, formula I, and note when X is O, S or NH the compounds taught by Wright include instant compounds. See column 5 for several species and column 6-22 for details of the process including various methods of making these compounds. See column 23-27 for various uracil compounds made which include instant compounds.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Son et al. WO 00/51990.

Teachings of Son et al. as discussed in the above 102 rejection is incorporated herein. As noted above, Son et al. teaches several variously substituted 2,4-pyrimiidine compounds for treating viral infections, which include compounds and composition claimed in the instant claims. Son et al., exemplifies small number of compounds wherein, Z is O, S or NH out of the various compounds possible from the definition of formula I

However, Son et al. teaches the equivalency of those compounds exemplified with specific substituents with that generically recited in page 2 for compound of Formula I.

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make 2,4-pyrimidinedione compounds variously substituted with Z, A, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

Claims 1-6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright US 6,177,437.

Teachings of Wright as discussed in the above 102 rejection is incorporated herein. As noted above, Wright teaches several uracil compounds for treating Herpes simplex virus, which include instant compounds and composition.

Wright exemplifies number of compounds wherein, Z is O, S or NH out of the various compounds possible from the definition of formula I

However, Wright teaches the equivalency of those compounds exemplified with specific substituents with that generically recited for compound of Formula I.

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make variously substituted uracil compounds as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

## Allowable Subject Matter

Claims 7-9 and 11-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (571) 272-0662. The examiner can normally be reached on Monday through Thursday from

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8.00 AM to 6.00 PM. The Acting Supervisory Patent Examiner (SPE) of the art unit 1624

is James O. Wilson, whose telephone number is (571) 272-0661.

The fax phone number for the organization where this application or proceeding

is assigned (571) 273-8300. Any inquiry of a general nature or relating to the status of

this application or proceeding should be directed to the receptionist whose telephone

number is (571) 272-1600.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAG. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should vou

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-2 17-9197 (toll-free).

Veuleabrama Balasubramanian

9/16/2005